



## PATENT ABSTRACTS OF JAPAN

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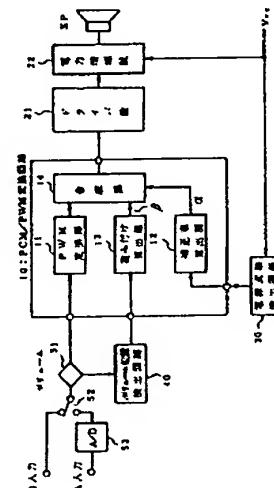
(54) COMPENSATION CIRCUIT FOR POWER SUPPLY FLUCTUATION OF SWITCHING AMPLIFIER

that it becomes small as the output level of the volume 51 increases.

(57) Abstract:

PURPOSE: To remove influence by reflecting power fluctuation on the input (PWM signal) of a switching amplifier.

CONSTITUTION: A PCM/PWM converter 10 is provided with a PWM conversion part 11 converting the output (PCM signal) of a volume 51 into the PWM signal, a correction factor calculation part 12 calculating the correction factor  $\alpha$  of a pulse width from a fluctuated quantity with a power source  $V_{cc}$  detected in a power fluctuation detection circuit 30, a weighting calculation part 13 calculating a weighting coefficient  $\beta$  from the coefficient of the volume 51 detected in a volume position detection circuit 40 and a synthesis part 14 correcting the pulse width of the PWM signal obtained in the PWM conversion part 11 by using the correction factor  $\alpha$  and the weighting coefficient  $\beta$ . The correction factor  $\alpha$  of power fluctuation is proportional to  $V_{cc}/V_{cc}'$  if  $V_{cc}$  is set to be a maximum value and  $V_{cc}'$  to be a present value. On the other hand, the weighting coefficient  $\beta$  has a characteristic



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